

Notice of Allowability**Application No.**

10/538,909

Applicant(s)

SEO, YEUN KWON

Examiner

Hai Vo

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed 03/05/2009.
2. ☒ The allowed claim(s) is/are 32,33 and 35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20090317.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert M. Barrett on March 17, 2009.

The application has been amended as follows:

Claim 32 (currently amended): An automobile interior material or construction sheet comprising:

a foamed layer produced by foaming and fusing together chips, said chips selected from the group consisting of polypropylene chips, polyethylene chips, polyurethane chips, and expanded polystyrene chips;

a short fiber layer produced by carding and setting short fibers including polypropylene fibers and polyethylene fibers in a mixing ratio of 3 to 7 : 7 to 3, on one side or both sides of the foamed layer; and

layers formed on both sides of the automobile interior material or construction sheet by coating at least one material ~~selected from the group consisting of~~ comprising plasters, cements, and ceramic pigments in a predetermined thickness, drying using hot air, and then pressing the material while heating to form an automobile or construction panel,

wherein, the short fibers are interlaced with each other in the foamed layer through a needle punching process so that the short fibers are embedded in a shape of a truss in the foamed layer, and the short fiber layer is set by heating to 120 to 250°C while the portions of the short fibers are pressed to melt the portions of the short fibers exposed outside the foamed layer and then harden the molten portions of the short fibers to form the short fiber layers on the foamed layer.

Claim 33 (currently amended):

An automobile interior material or construction sheet comprising:

a foamed layer produced by foaming and fusing together chips, said chips selected from the group consisting of polypropylene chips, polyethylene chips, polyurethane chips, and expanded polystyrene chips;

a short fiber layer~~(s)~~ produced by carding and setting short fibers including polypropylene fibers and polyethylene fibers mixed with each other at a ratio of 3 to 7 : 7 to 3, on one side or both sides of the foamed layer;

a fiber layer produced by secondarily carding fibers including polypropylene or polyethylene fibers, and natural fiber mixed with each other in mixing ratio of 3 to 7 : 7 to 3, and layered on both exposed sides of the foamed layers; and

layers formed on both sides of the automobile interior material or construction sheet by coating at least one material comprising ~~selected from the group consisting of~~ plasters, cements, and ceramic pigments in a predetermined thickness, drying using hot

air, and then pressing the material while heating to form an automobile or construction panel,

wherein, the short fibers are interlaced with each other in the foamed layer through a needle punching process so that the short fibers are embedded in a shape of a truss in the foamed layer, and the fiber layers are set by heating to 120 to 250°C while the fiber layers are pressed to melt the portions of the short fibers exposed on outside the foamed layer and then harden the molten portions of the short fibers to form the short fiber layers on the foamed layer and simultaneously attaching entirely the fiber layer to the foamed layer.

Claim 35 (currently amended): An automobile interior material or construction sheet with excellent processability comprising:

a foamed layer produced by foaming and fusing together chips, said chips selected from any one of the group consisting of polypropylene chips, polyethylene chips, polyurethane chips, and expanded polystyrene chips;

a short fiber layer(s) produced by carding and setting short fibers and natural fibers mixed with each other, on one side or both sides of the foamed layer, wherein the foamed layer and short fibers each are made from the same resin material; and

layers formed on both sides of the automobile interior material or construction sheet by coating at least one material comprising ~~selected from the group consisting of~~ plasters, cements, and ceramic pigments in a predetermined thickness, drying using hot

air, and then pressing the material while heating to form an automobile or construction panel,

wherein, the short fibers are interlaced with each other in the foamed layer through a needle punching process so that the short fibers are embedded in a shape of a truss in the foamed layer, and the short fiber layer is~~(are)~~ set by heating to 120 to 250°C while the portions of the short fibers are pressed to melt the portions of the short fibers exposed outside the foamed layer and then harden the molten portions of the short fibers to form the short fiber layers on the foamed layer.

Cancel claims 36-38.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: Note that Applicant's amendment and the examiner's amendment are sufficient to overcome the 112 claim rejections and the art rejections; and sufficient to place the instant claims in condition for allowance.

Of the references of record, the most pertinent are Luciano et al (US 4,357,386), Jamieson (US 3,059,312), Marier et al (US 5,994,245) and Kaplo (US 7,022,405).

Luciano and Jamieson both are concerned with a composite papermaker felt made from a foamed layer, a short fiber layer wherein the short fiber layers are extending through the foam layer through a needle punching process. One of skilled in the art would not have been motivated to add a plaster coating on the composite papermaker felt because to do so would defeats the objectives of the references.

Marier is related to a laminated product for use in footwear manufacturing comprising a foamed layer, a short fiber layer wherein the short fiber layers are extending through the foam layer through a needle punching process. One of skilled in the art would not have been motivated to add a plaster coating on the laminated insole because to do so would destroy the utility of the product.

Kaplo contemplates to a conductive gasket comprising a foamed layer, a short fiber layer wherein the short fiber layers are extending through the foam layer through a needle punching process. One of skilled in the art would not have been motivated to add a plaster coating on the conductive gasket because to do so would destroy the utility of the product.

Note that, none of the prior art, alone or in combination, teach or suggest the automobile interior material or construction sheet having the structure set out in the claims. Accordingly, the instant claims are deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/
Primary Examiner, Art Unit 1794